Patent Application

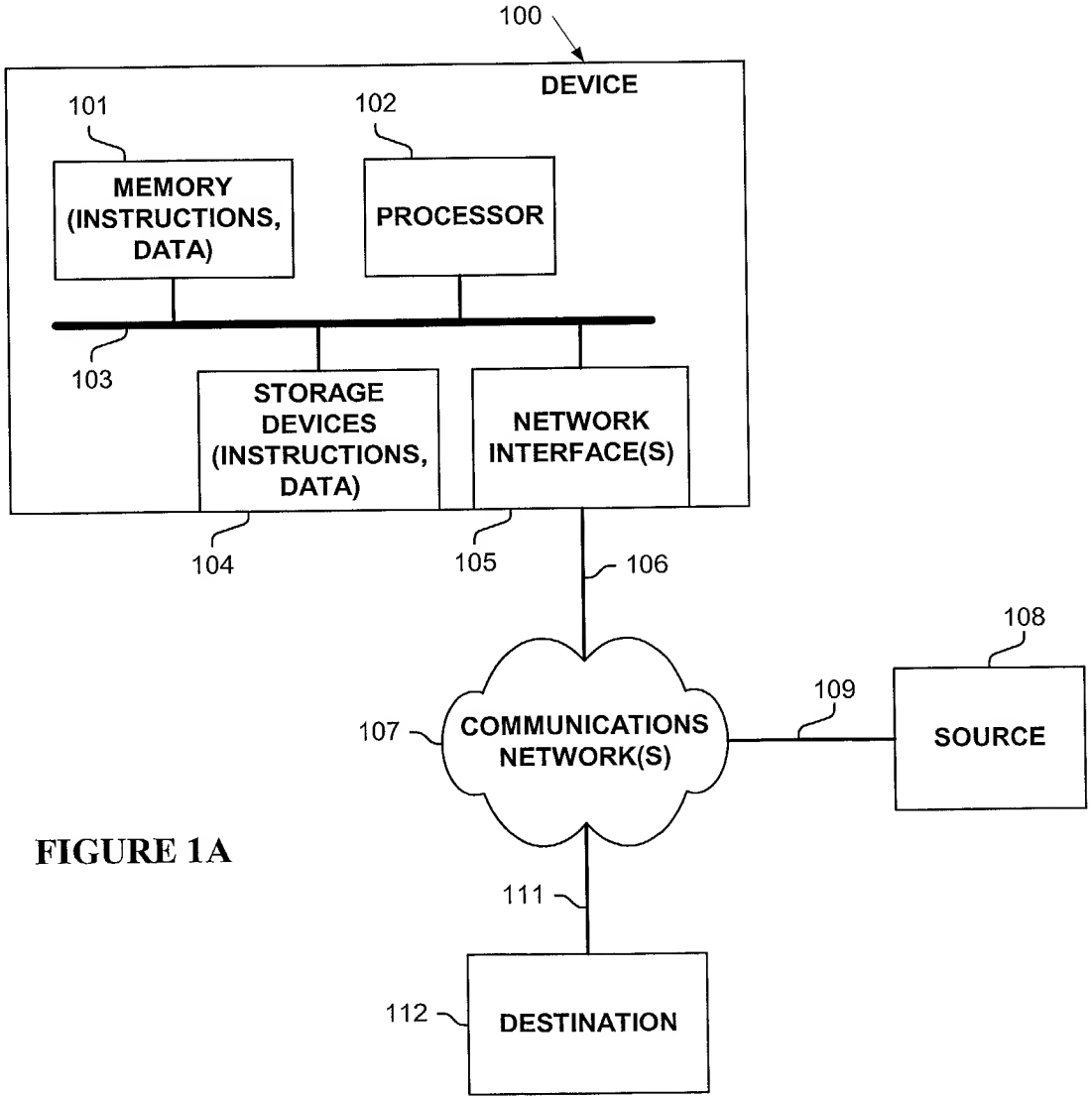

FIGURE 1A

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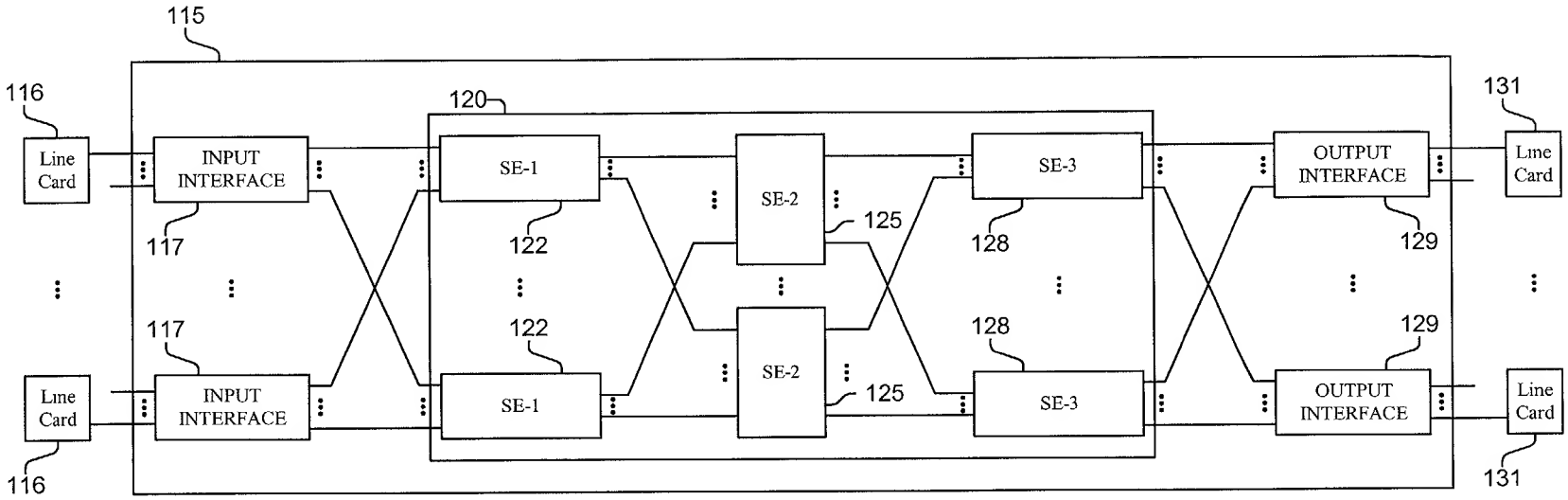


FIGURE 1B

TS40240 Redacted

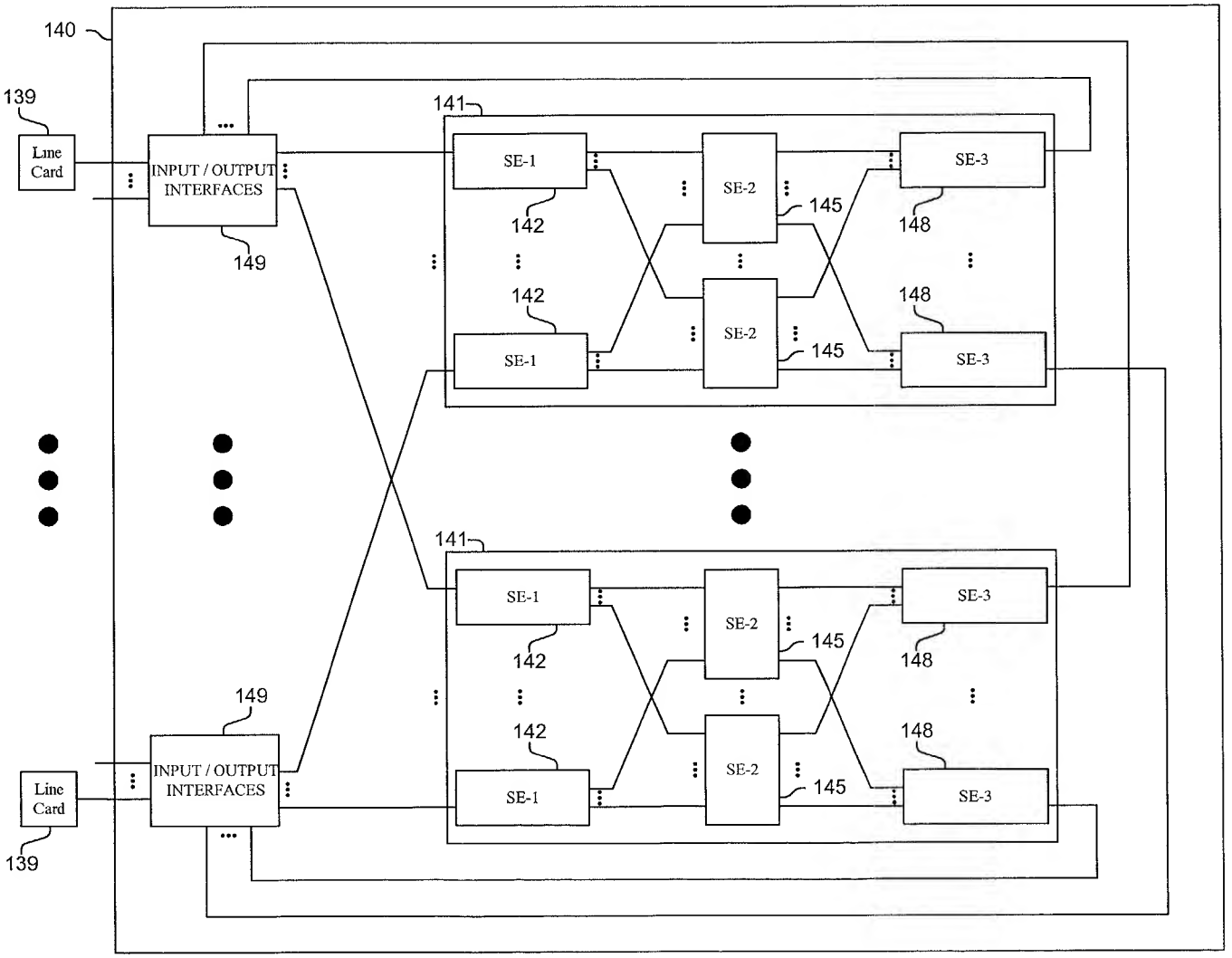


FIGURE 1C

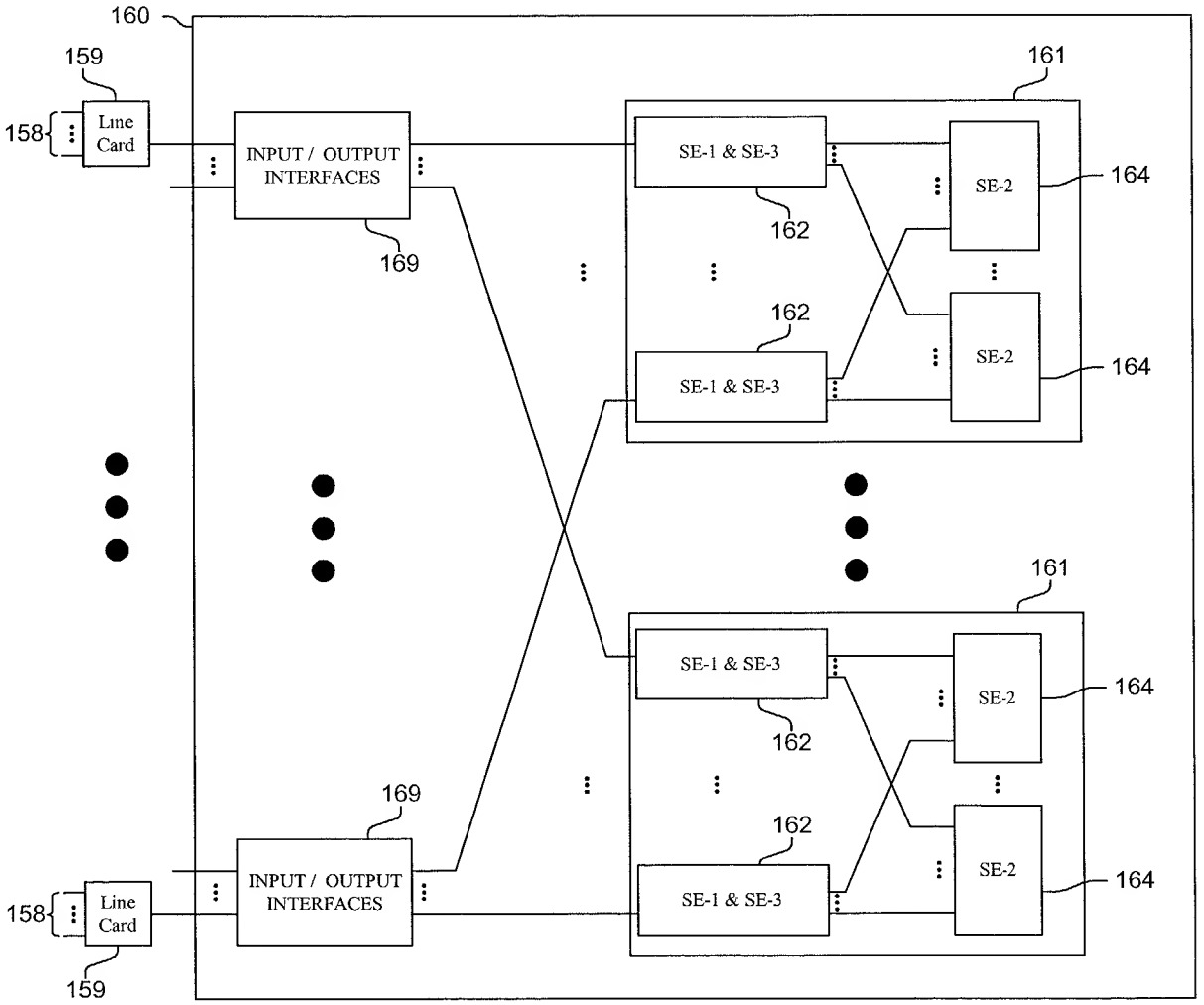

160
159
158
Line Card
INPUT / OUTPUT INTERFACES
169
161
SE-1 & SE-3
162
SE-2
164
SE-1 & SE-3
162
SE-2
164
161
SE-1 & SE-3
162
SE-2
164
169
SE-1 & SE-3
162
SE-2
164
INPUT / OUTPUT INTERFACES
158
Line Card
159

FIGURE 1D

TOHOSO 5602250

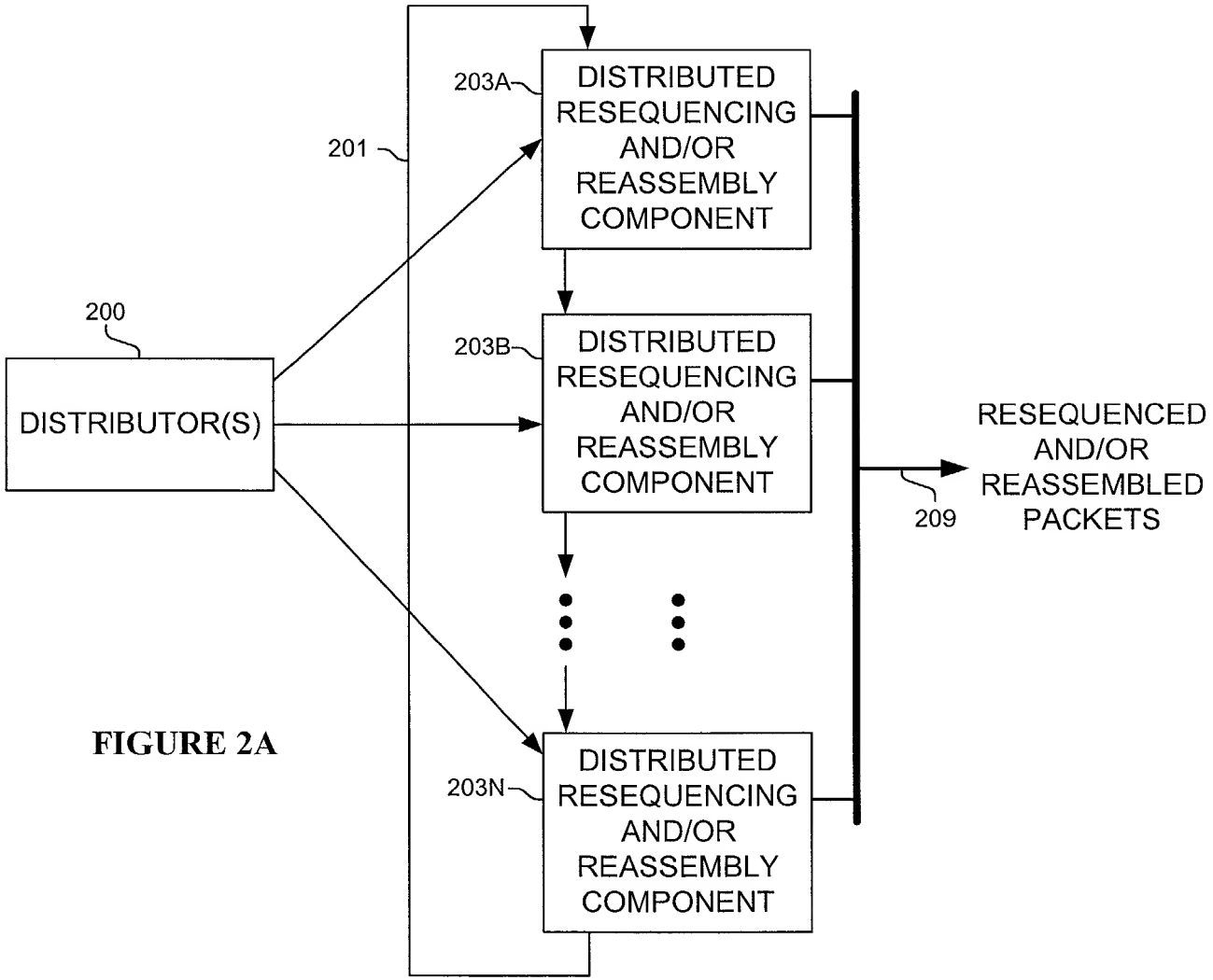


FIGURE 2A

Document Received

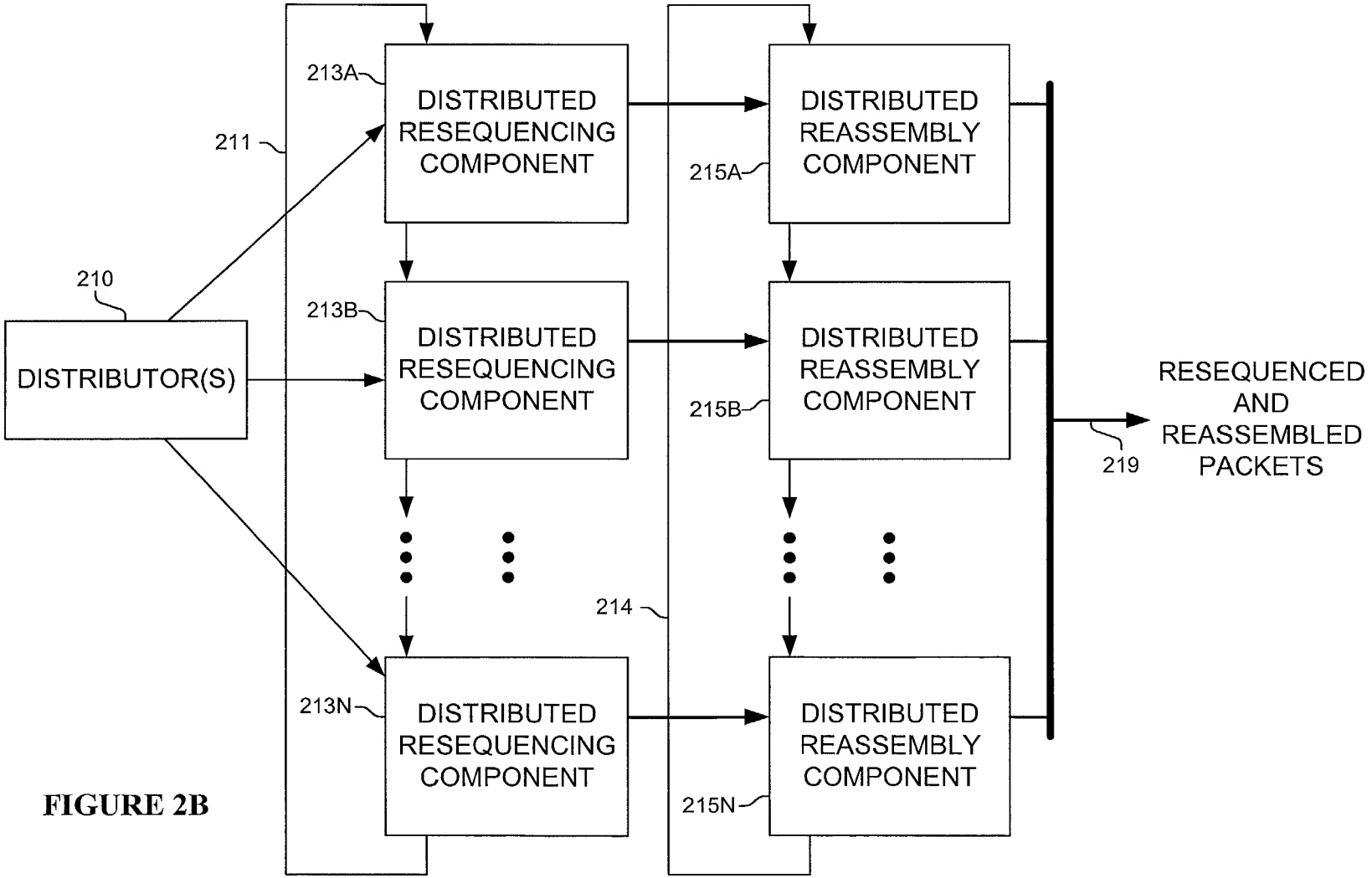


FIGURE 2B

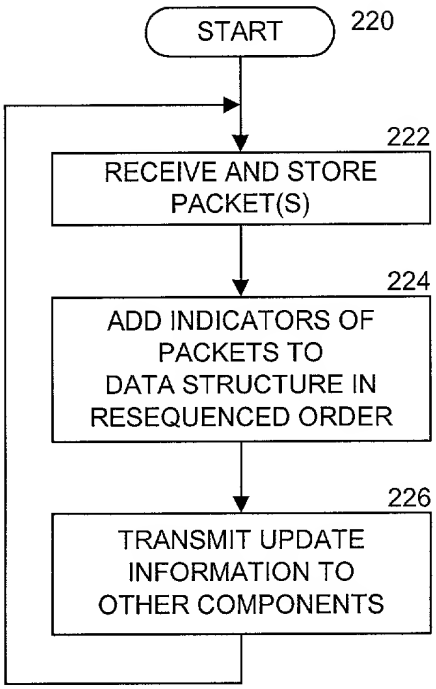


FIGURE 2C

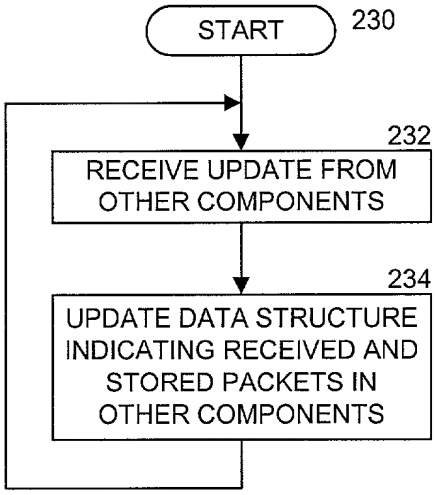


FIGURE 2D

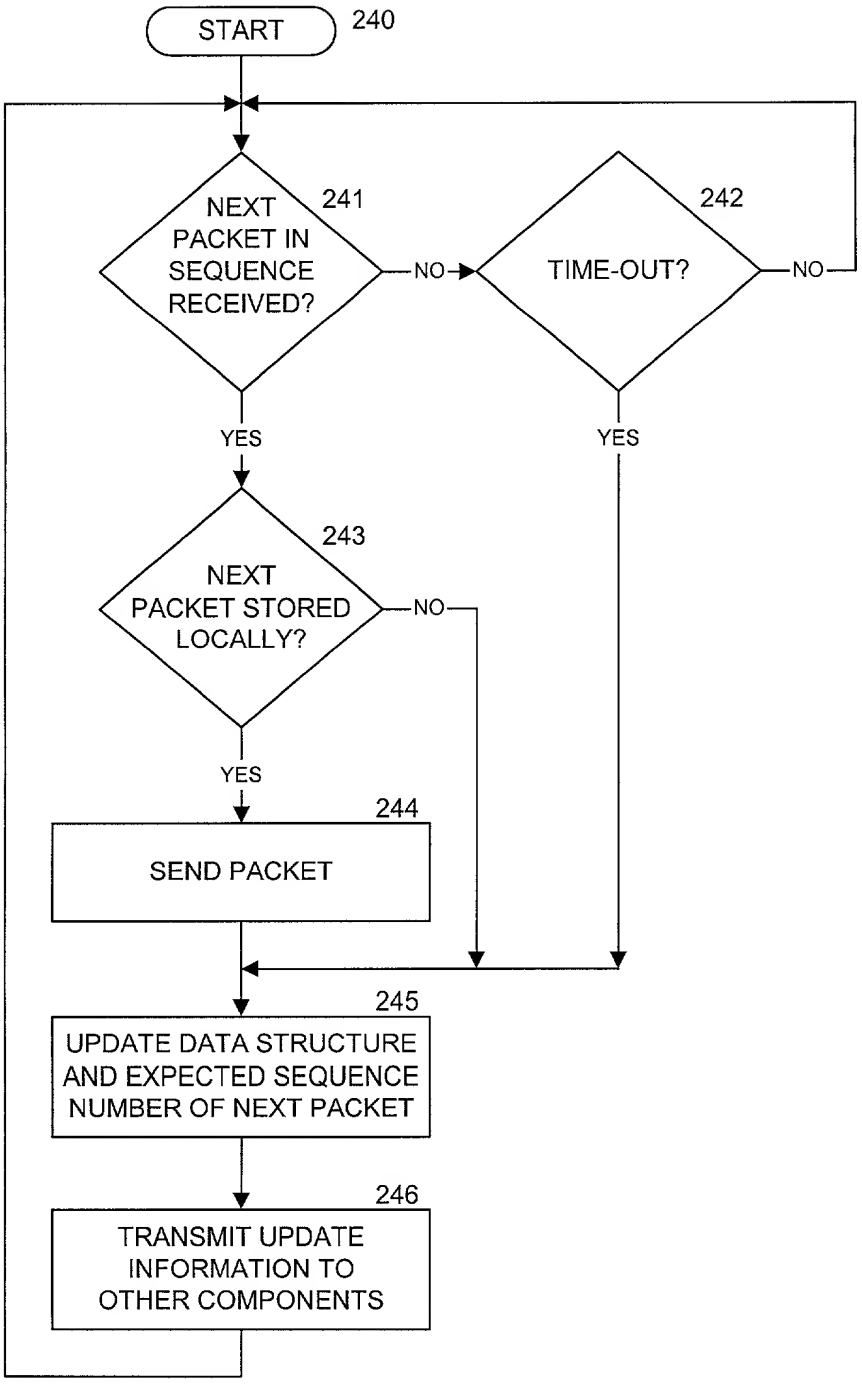

START
240
NEXT PACKET IN SEQUENCE RECEIVED?
241
NO
TIME-OUT?
242
NO
YES
YES
NEXT PACKET STORED LOCALLY?
243
NO
YES
SEND PACKET
244
UPDATE DATA STRUCTURE AND EXPECTED SEQUENCE NUMBER OF NEXT PACKET
245
TRANSMIT UPDATE INFORMATION TO OTHER COMPONENTS
246

FIGURE 2E

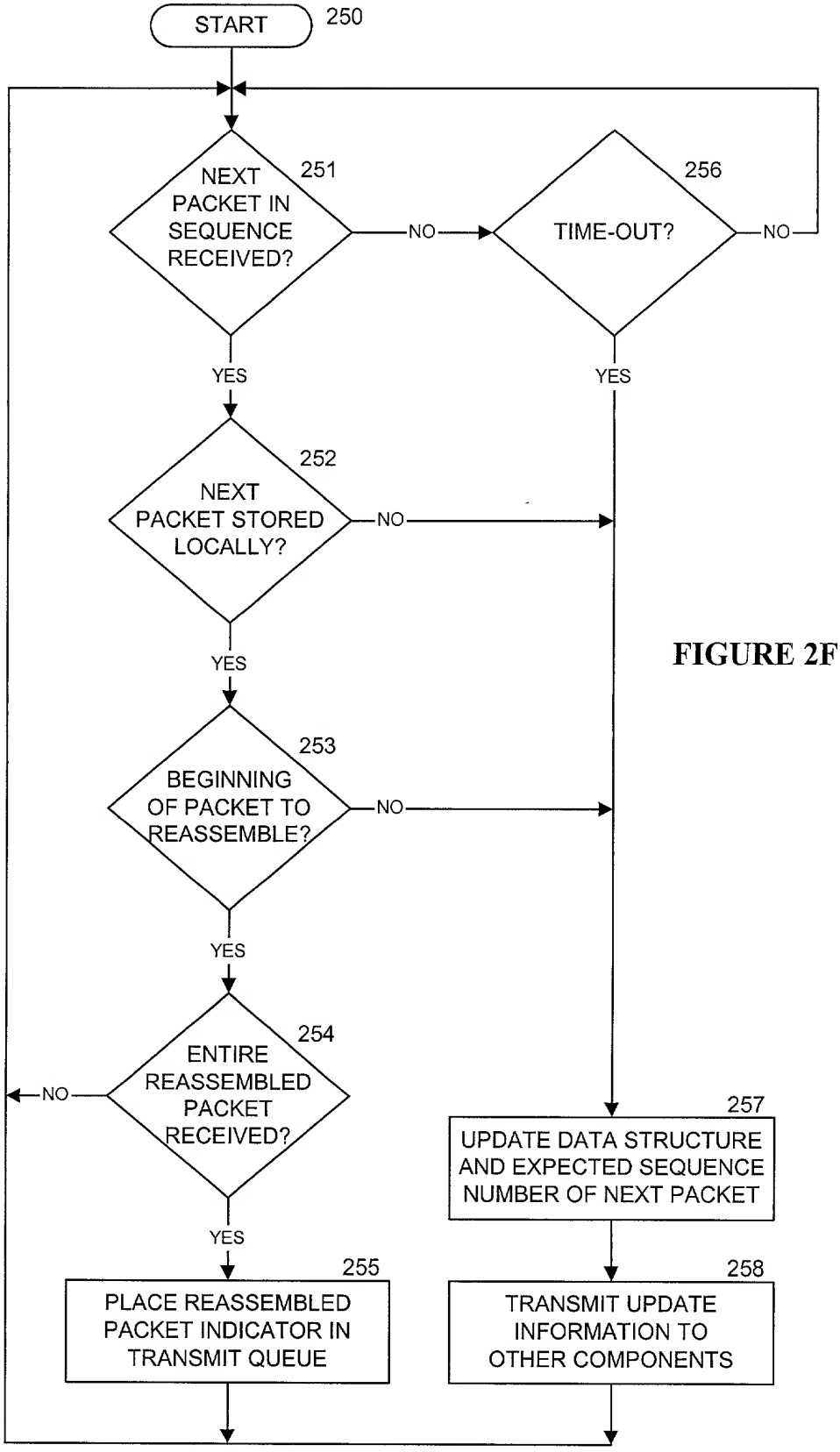

START
250
NEXT PACKET IN SEQUENCE RECEIVED?
251
NO
TIME-OUT?
256
NO
YES
YES
NEXT PACKET STORED LOCALLY?
252
NO
YES
BEGINNING OF PACKET TO REASSEMBLE?
253
NO
YES
ENTIRE REASSEMBLED PACKET RECEIVED?
254
NO
YES
UPDATE DATA STRUCTURE AND EXPECTED SEQUENCE NUMBER OF NEXT PACKET
257
PLACE REASSEMBLED PACKET INDICATOR IN TRANSMIT QUEUE
255
TRANSMIT UPDATE INFORMATION TO OTHER COMPONENTS
258

FIGURE 2F

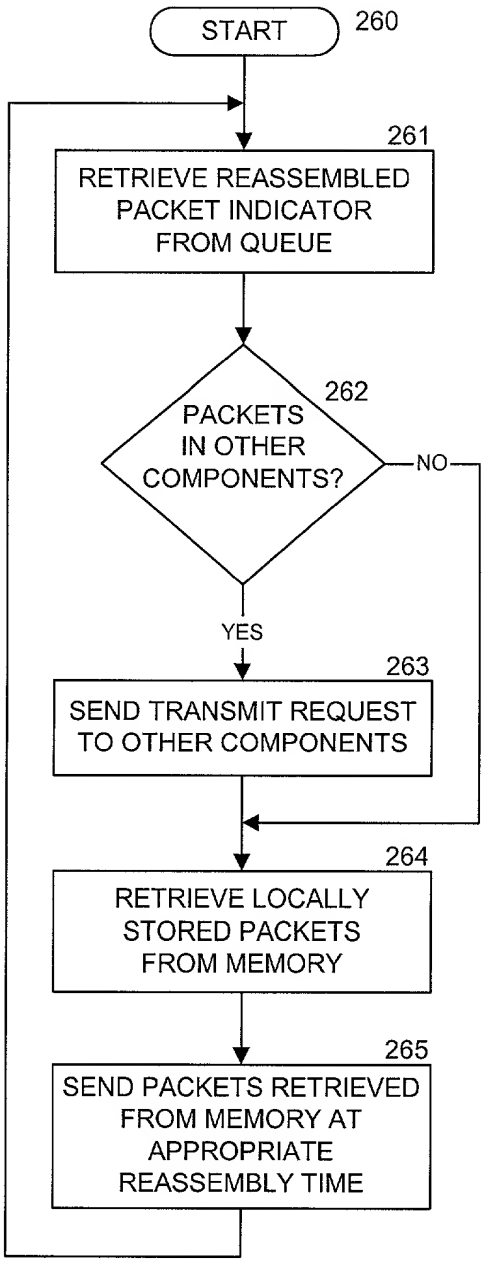

START
260
261
RETRIEVE REASSEMBLED PACKET INDICATOR FROM QUEUE
262
PACKETS IN OTHER COMPONENTS?
NO
YES
263
SEND TRANSMIT REQUEST TO OTHER COMPONENTS
264
RETRIEVE LOCALLY STORED PACKETS FROM MEMORY
265
SEND PACKETS RETRIEVED FROM MEMORY AT APPROPRIATE REASSEMBLY TIME

FIGURE 2G

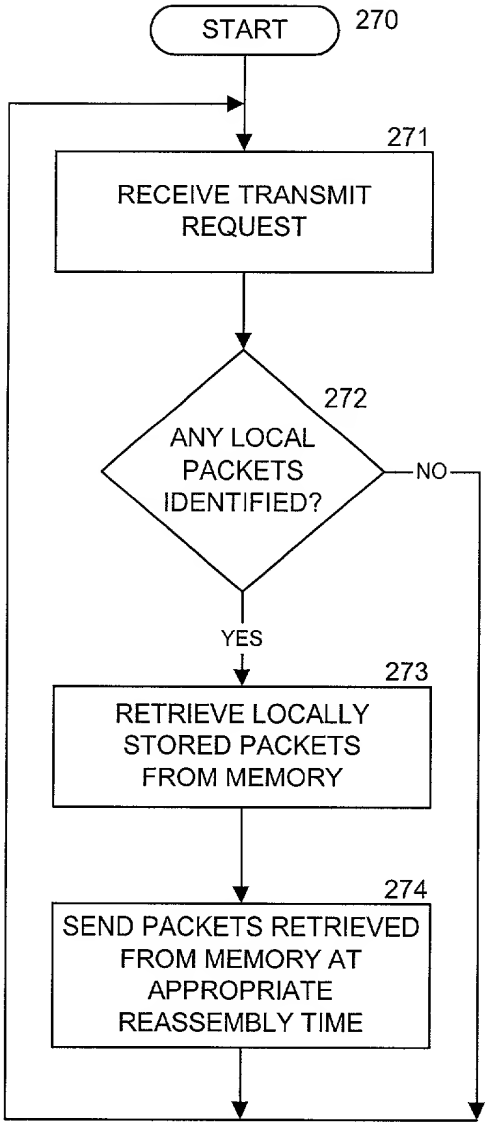

START
270
271
RECEIVE TRANSMIT REQUEST
272
ANY LOCAL PACKETS IDENTIFIED?
NO
YES
273
RETRIEVE LOCALLY STORED PACKETS FROM MEMORY
274
SEND PACKETS RETRIEVED FROM MEMORY AT APPROPRIATE REASSEMBLY TIME

FIGURE 2H

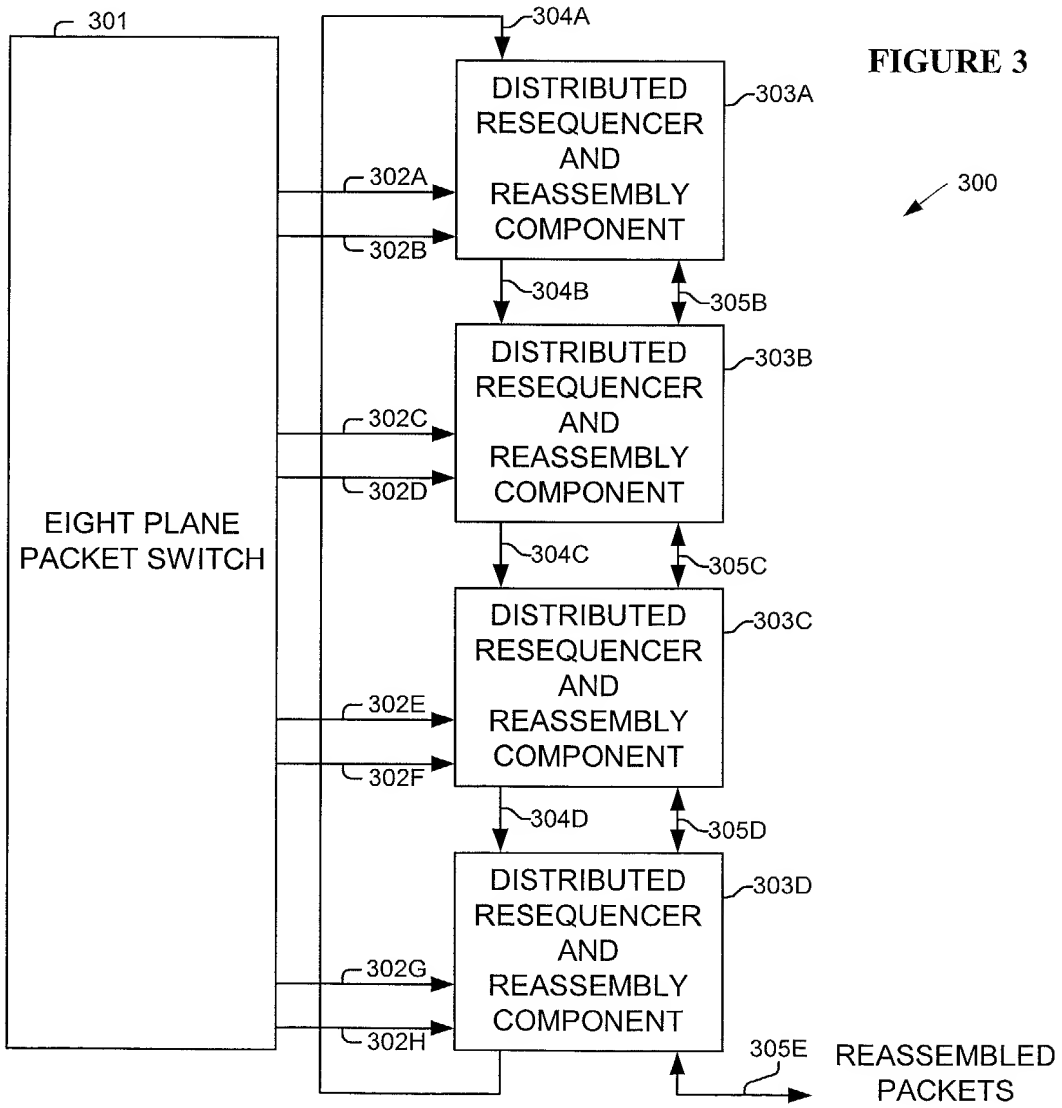

301
EIGHT PLANE PACKET SWITCH
304A
DISTRIBUTED RESEQUENCER AND REASSEMBLY COMPONENT
303A
302A
302B
304B
305B
DISTRIBUTED RESEQUENCER AND REASSEMBLY COMPONENT
303B
302C
302D
304C
305C
DISTRIBUTED RESEQUENCER AND REASSEMBLY COMPONENT
303C
302E
302F
304D
305D
DISTRIBUTED RESEQUENCER AND REASSEMBLY COMPONENT
303D
302G
302H
305E
REASSEMBLED PACKETS
300

FIGURE 3

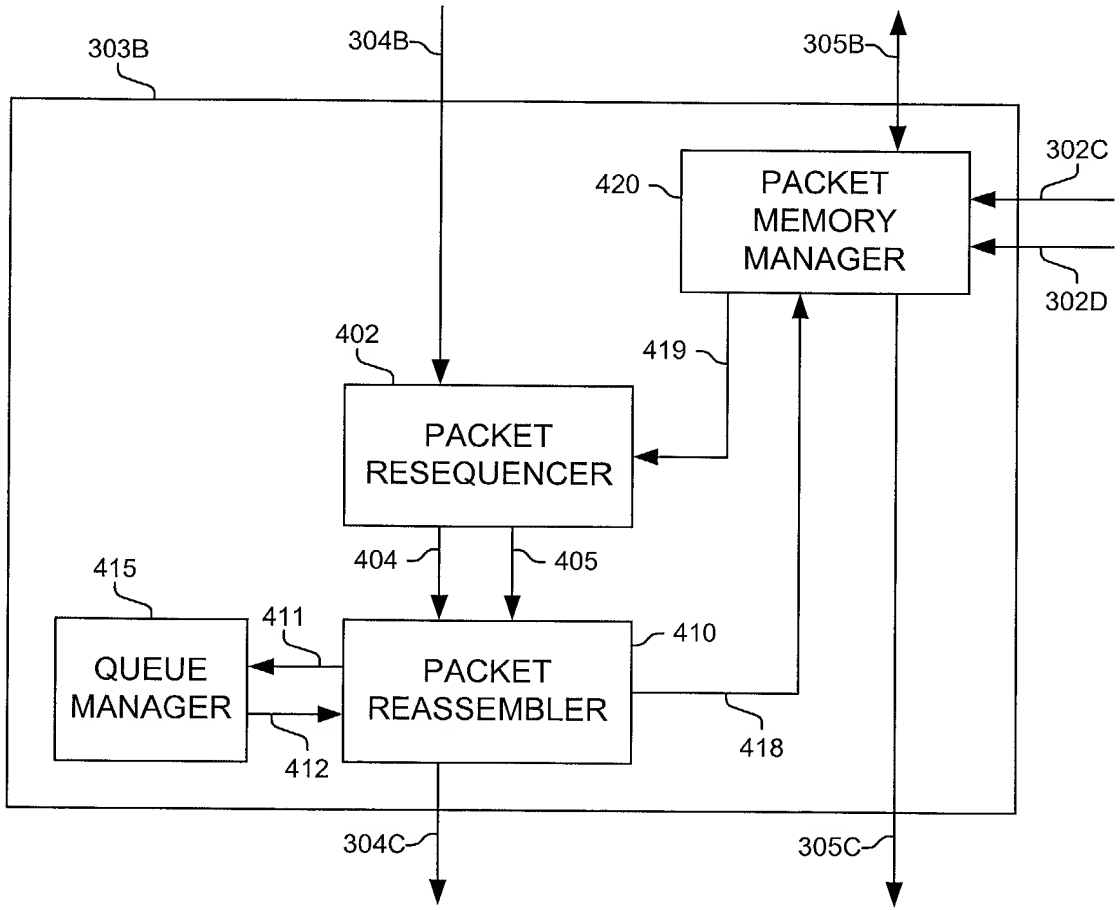

303B
304B
305B
302C
420
PACKET
MEMORY
MANAGER
302D
402
419
PACKET
RESEQUENCER
404
405
415
411
410
QUEUE
MANAGER
PACKET
REASSEMBLER
418
412
304C
305C

FIGURE 4A

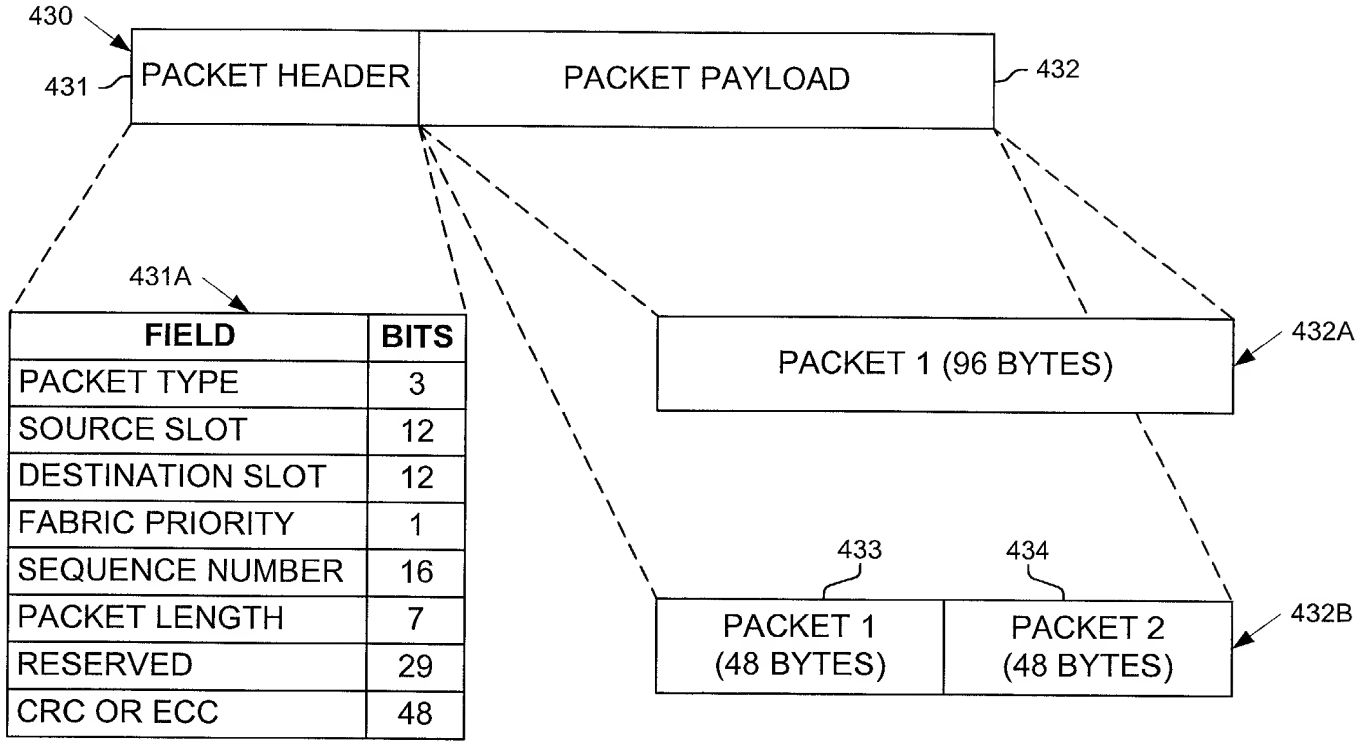
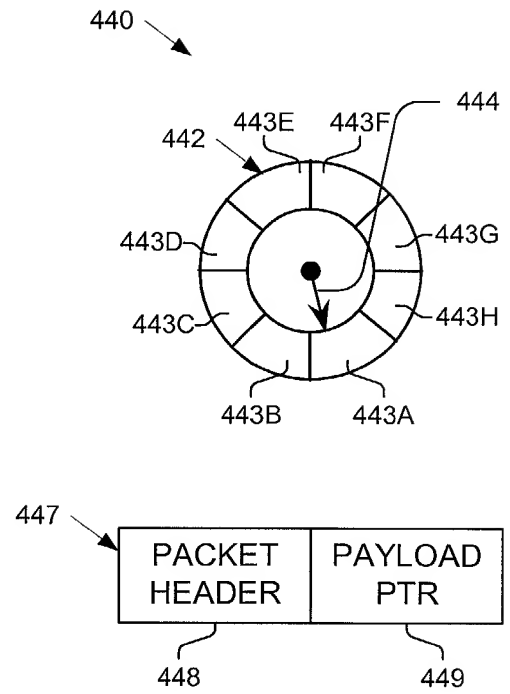
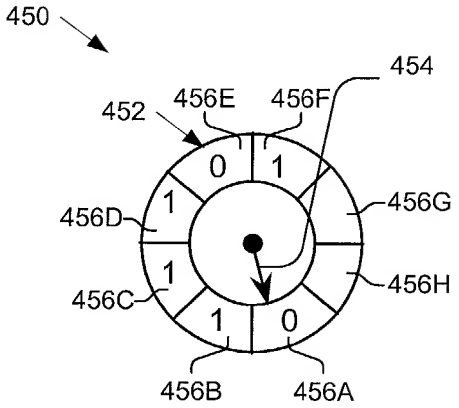

430
431
PACKET HEADER
PACKET PAYLOAD
432
431A
FIELD
BITS
PACKET TYPE
3
SOURCE SLOT
12
DESTINATION SLOT
12
FABRIC PRIORITY
1
SEQUENCE NUMBER
16
PACKET LENGTH
7
RESERVED
29
CRC OR ECC
48
PACKET 1 (96 BYTES)
432A
433
434
PACKET 1
(48 BYTES)
PACKET 2
(48 BYTES)
432B

FIGURE 4B



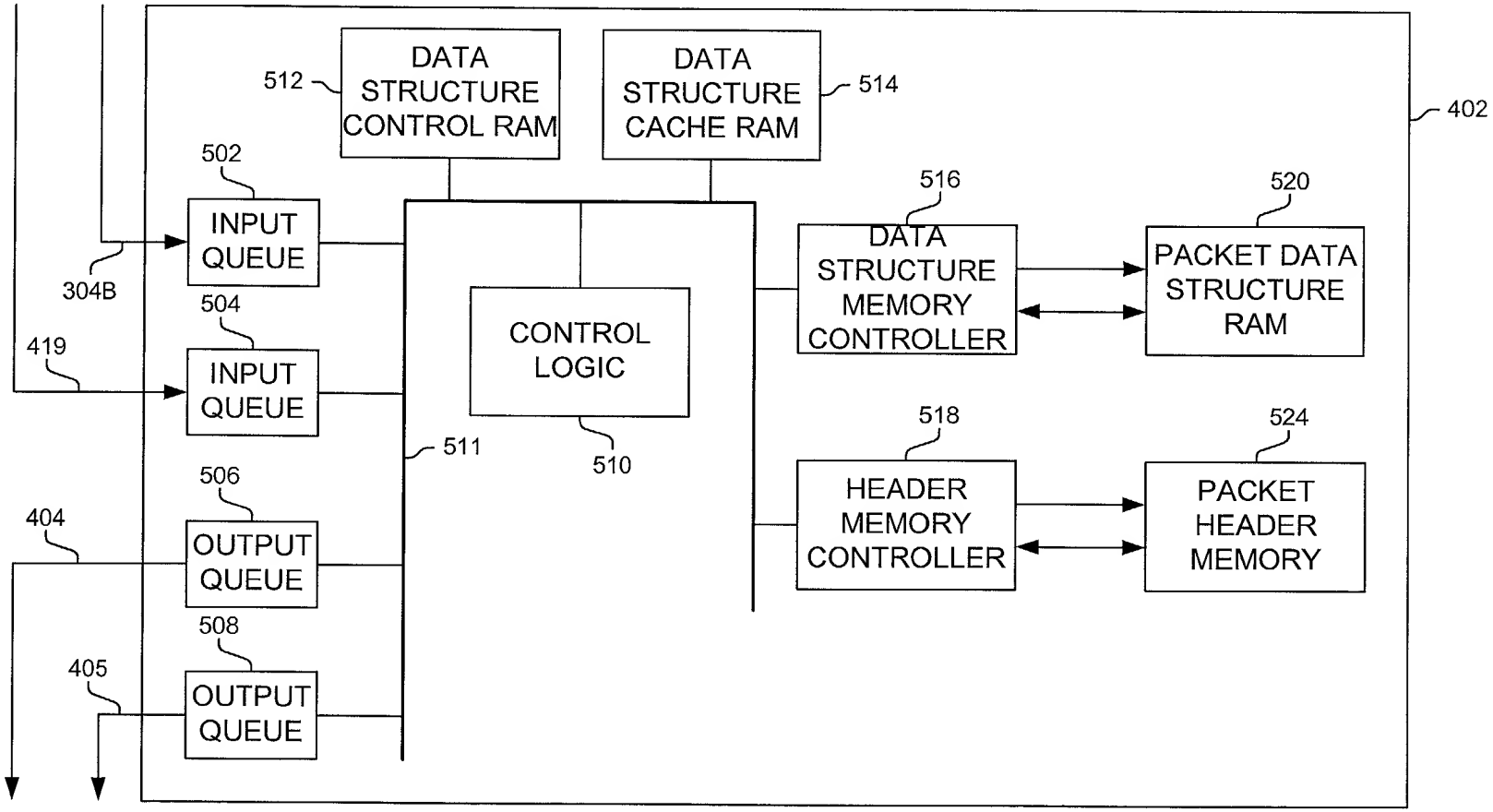
LOCAL DATA STRUCTURE

FIGURE 4C

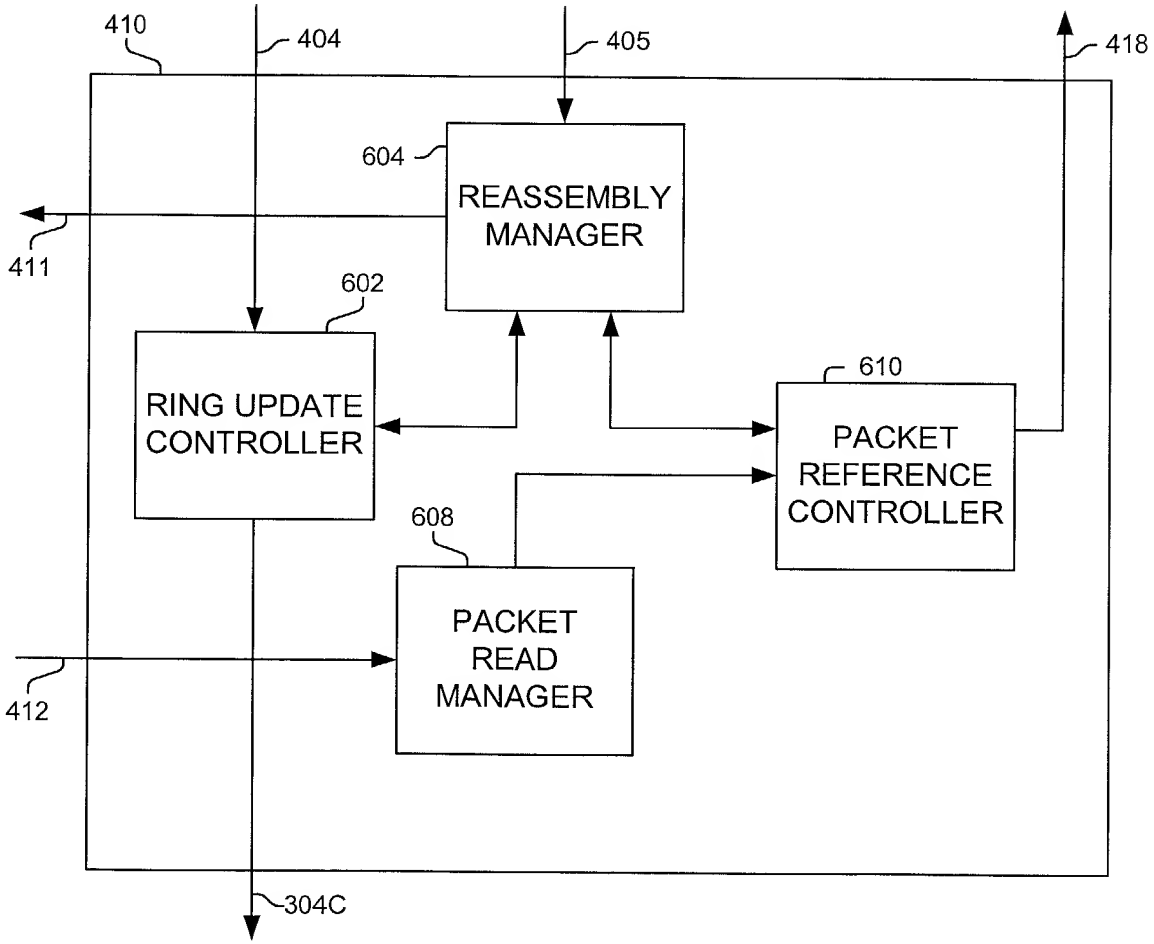


GLOBAL DATA STRUCTURE

FIGURE 4D

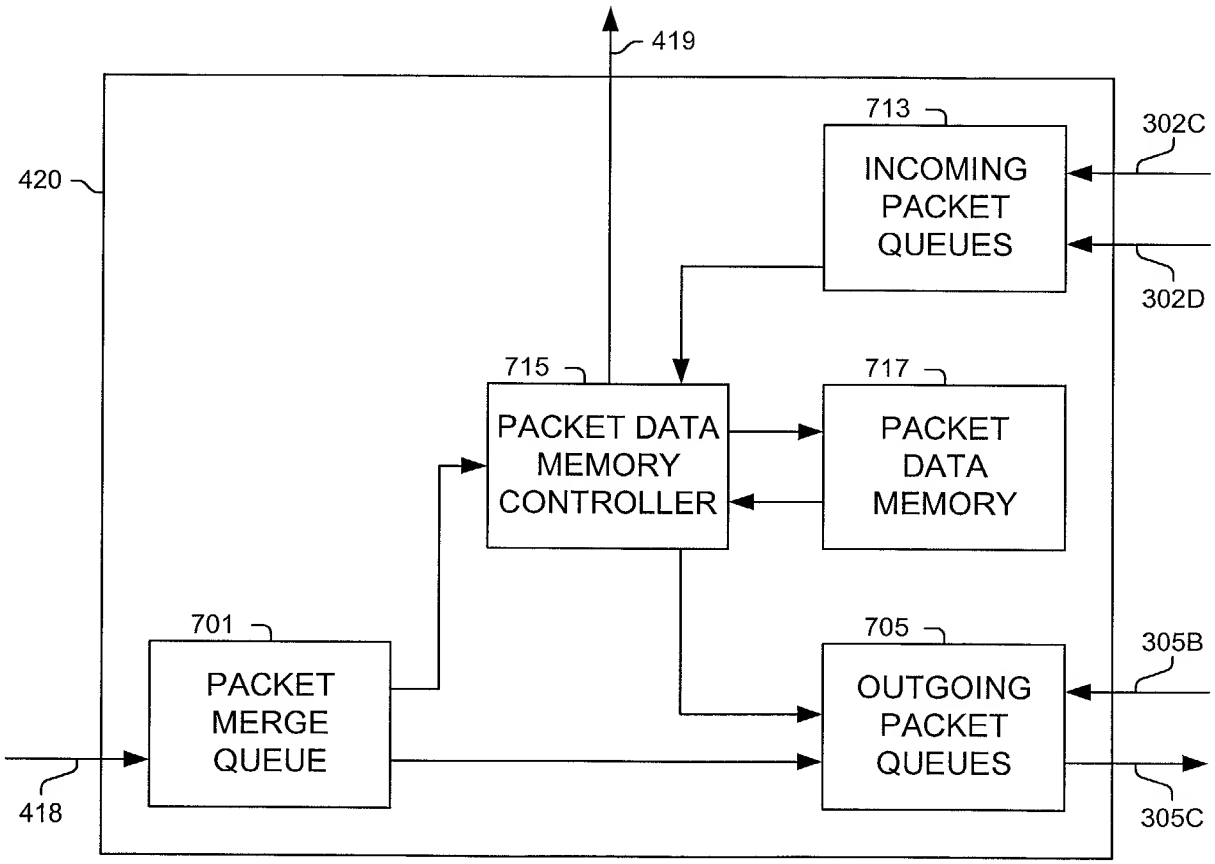


PACKET RESEQUENCER
FIGURE 5

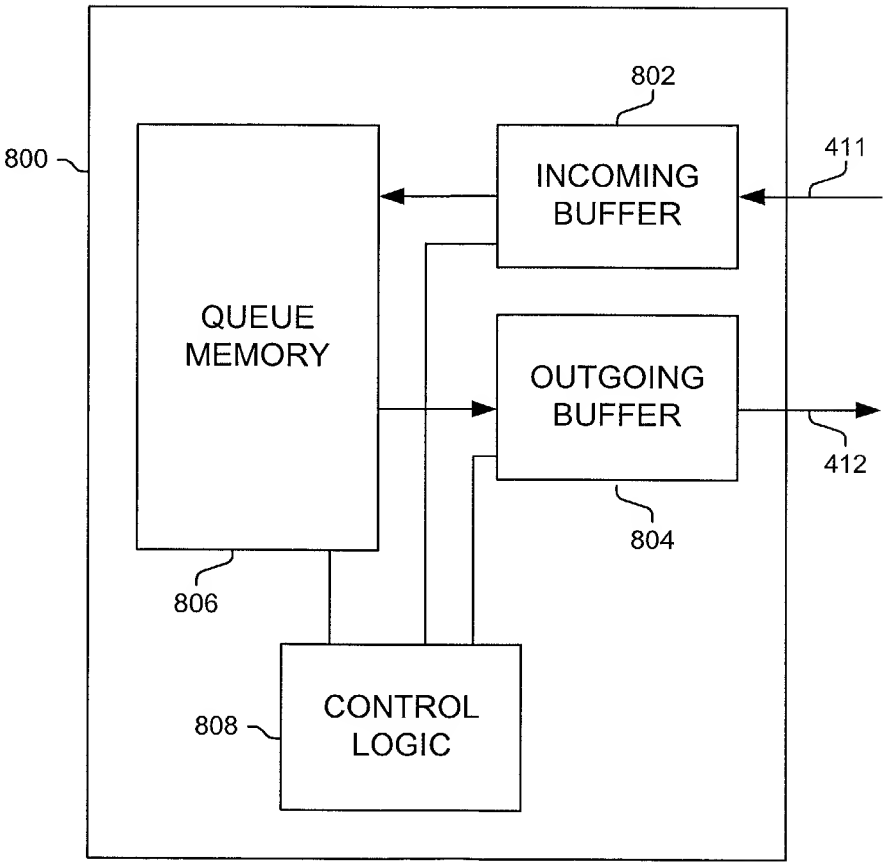


PACKET REASSEMBLER
FIGURE 6

Document Classified



PACKET MEMORY MANAGER
FIGURE 7



QUEUE MANAGER
FIGURE 8